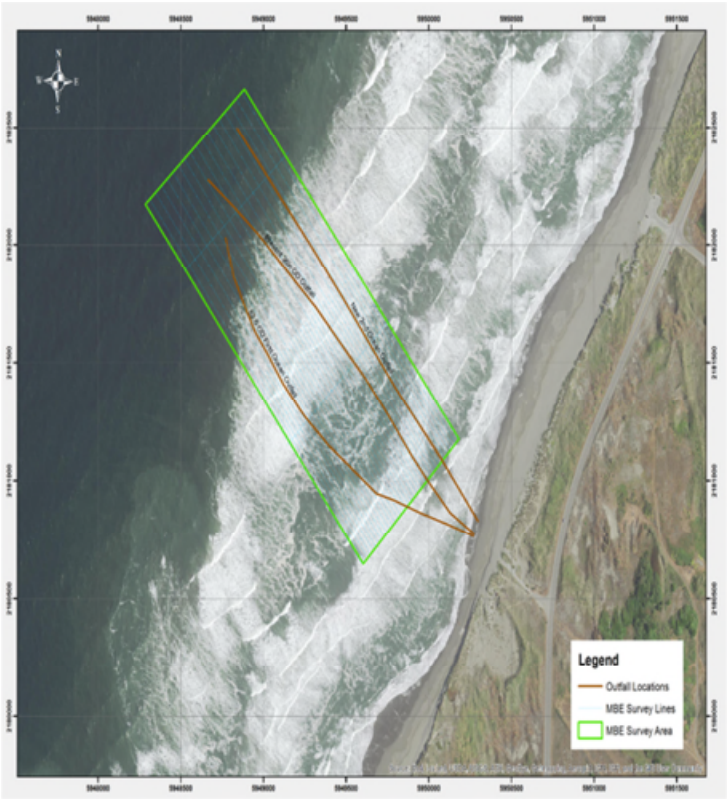
SIMPSON HUMBOLDT OCEAN OUTFALL MULTIBEAM BATHYMETRIC SURVEY AND VIDEO INSPECTION
HUMBOLDT BAY, CALIFORNIA

Field Operations Report



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SIMPSON HUMBOLDT OCEAN OUTFALL MULTIBEAM BATHYMETRIC SURVEY AND VIDEO INSPECTION HUMBOLDT BAY, CALIFORNIA

Field Operation Report

1.0 INTRODUCTION

Ecosystems Management Inc. worked with Tetra Tech to conduct a survey on Sept 30th 2015 to locate and determine the conditions of three ocean outfalls at the former Simpson mill location in Humboldt County near Fairhaven, California, in addition, a test patch was completed on September 29th, 2015. The purpose of this survey was to assess the location and determine the condition of the ocean outfalls at the former Simpson mill location in Humboldt Country near Fairhaven, California. A RESON 7125 SV1 MBE (400kHz) survey and a subsequent towed underwater camera sled survey were conducted to provide coverage in the 800 x 2000 foot are of interest. Including the full width of swath coverage of the multibeam the survey data encompasses an area approximately 1000 feet wide and 1500 feet long. Shallow water and breaking waves prohibited surveying any closer to shore. RTK GPS was used for height (Z), as well as position (X and Y), to compensate for changes in water surface elevation, vessel squat and settlement, and varying draft caused by vessel loading. Use of RTK GPS for height is typically known as "RTK tides." With RTK tides, changes in the elevation of the water surface are recorded and compensated for in real time and in post-processed sounding data.

A shallow bathymetric survey offshore of Humboldt Bay was needed to assess the location and determine the condition of the ocean outfalls at the former Simpson mill location in Humboldt Country near Fairhaven, California.

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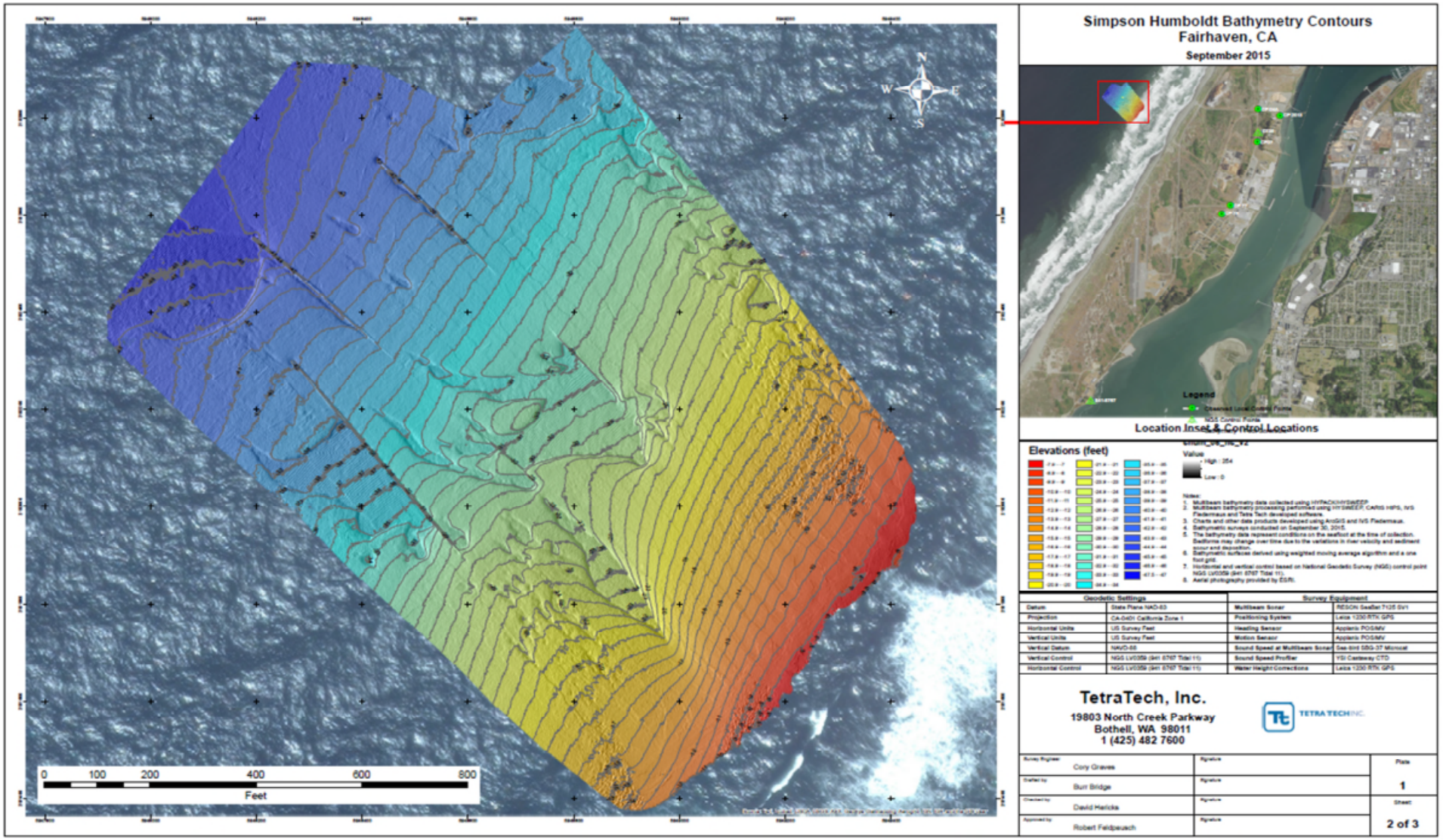

Figure 1-1. Map showing the Simpson Humboldt Bathymetry Contours Fairhaven, CA.

1.1 PERMITTING: CA STATE LANDS COMMISSION

Prior to the geophysical survey work, CE acquired the necessary permit from the California State Lands Commission (Permit # PRC 8536.9). As per permit requirements, a Marine Wildlife Contingency Plan was prepared and a marine wildlife monitor was present during the surveys to assure that marine mammals were not harmed by the acoustically generated pulses produced by the bathymetric survey equipment. Mammal observations that were carried out during the surveys determined when survey activities should be altered or stopped to avoid interaction with marine mammals. A copy of the Marine Mammal Observer Report during the survey and test patch (29 September to 30 September 2015) is in Appendix A. Additionally, all parties identified in Exhibit C of the permit were sent notification of the geophysical survey activity.

2.0 SURVEY METHODS AND INSTRUMENTATION

2.1 MULTIBEAM SURVEY DATE

The survey was conducted on Sept 30th 2015 to locate and determine the conditions of three ocean outfalls at the former Simpson mill location in Humboldt County near Fairhaven, California.

2.2 SURVEY VESSEL

The *Ugle Duck*, a 35-foot-long multibeam survey vessel, was used as the survey vessel for the project (Figure 2-1). The vessel was equipped with the following primary equipment for execution of the survey:

1. RESON 7125 SV1 MBE (400kHz) multibeam echosounder with a dual frequency system (200/400 kHz), utilizing 400kHz for the purpose of this survey.
2. Video Ray Pro4 Inspection ROV.

2.3 DATA ACQUISITION AND INSTRUMENTATION

2.3.1 GPS Positioning

A Differential Global Navigation Satellite System (DGNSS) Precise Point Positioning system provided high accuracy position data (sub-half meter accuracy) during the survey. Position data was output to all sensor acquisition systems logged. RTK GPS was used for height (Z), as well as position (X and Y), to compensate for changes in water surface elevation, vessel squat and settlement, and varying draft caused by vessel loading. Use of RTK GPS for height is typically known as “RTK tides.” With RTK tides, changes in the elevation of the water surface are recorded and compensated for in real time and in post-processed sounding data.

Table 2-1. Simpson Humboldt Ocean Outfall bathymetric survey GPS coordinates (NAD83) for the start and end points of each survey line.

Trackline Number	Date	Start Time (UTC)	Start Lat	Start Long	End Lat	End Long
1	9/30/2015	18:36:11.99	40.79792639	-124.21253145	40.80000286	-124.21669566
2	9/30/2015	18:28:38	40.79791429	-124.21256750	40.79999389	-124.21633888
3	9/30/2015	18:20:56.99	40.79769005	-124.21276184	40.80045720	-124.21661612
4	9/30/2015	18:14:35	40.79748436	-124.21304325	40.80006573	-124.21610961
5	9/30/2015	18:07:05.99	40.79758192	-124.21272956	40.80040226	-124.21633545
6	9/30/2015	17:56:47.99	40.79768313	-124.21285627	40.79999694	-124.21564132
7	9/30/2015	18:03:18	40.80004514	-124.21658157	40.79767023	-124.21268500
8	9/30/2015	17:50:47	40.79940481	-124.21905934	40.79774950	-124.21267639
9	9/30/2015	18:11:11.99	40.80069497	-124.21596762	40.79762466	-124.21284579
10	9/30/2015	18:28:38	40.79791429	-124.21256750	40.79999389	-124.21633888
11	9/30/2015	18:20:56.99	40.79769005	-124.21276184	40.80045720	-124.21661612
12	9/30/2015	18:17:34	40.80027965	-124.21605544	40.79784571	-124.21255631
13	9/30/2015	18:24:58.99	40.80091923	-124.21647170	40.79799805	-124.21246034
14	9/30/2015	18:32:20.99	40.80028214	-124.21652582	40.79804380	-124.21242569
15	9/30/2015	18:40:46	40.80093745	-124.21616049	40.79828942	-124.21232666
16	9/30/2015	18:44:39.99	40.79807243	-124.21266418	40.80077727	-124.21469114
17	9/30/2015	18:48:31	40.80099704	-124.21459065	40.79882170	-124.21242411
18	9/30/2015	18:40:11	40.80047085	-124.21678707	40.80086668	-124.21626284
19	9/30/2015	18:52:58.99	40.79845560	-124.21247815	40.80120693	-124.21449433
20	9/30/2015	19:05:13	40.79871738	-124.21180359	40.80132560	-124.21432826
21	9/30/2015	18:57:10.99	40.80104190	-124.21489867	40.79862457	-124.21190315
22	9/30/2015	18:17:34	40.80027965	-124.21605544	40.79784571	-124.21255631

Figure 2-1. Above is the RESON 7125 Multibeam Echosounder on Vessel UGLE DUCKLING; Below is a view of the vessel UGLE DUCKLING in the Eureka, CA marina.

2.3.4 Multibeam Echo-sounder System (MBES)

The RESON 7125 multibeam echosounder with a dual frequency system (200/400 kHz) is a high-resolution multibeam sonar system that measures relative water depths over a 140° (or 165°) wide swath perpendicular to the vessel's track. The system consists of a surface transceiver with integrated multiport card and a standard 25m cable run to the transducers. The MBE is used for high resolution surveys for inland or coastal areas. The total survey area was approximately 1,427,445 square feet, or an irregular area approximately 1000 feet wide and 1500 long. The survey area ranged in depth from -8 feet to -48 feet NAVD88. Survey operations were conducted 0.5 nautical miles (NM) off shore.

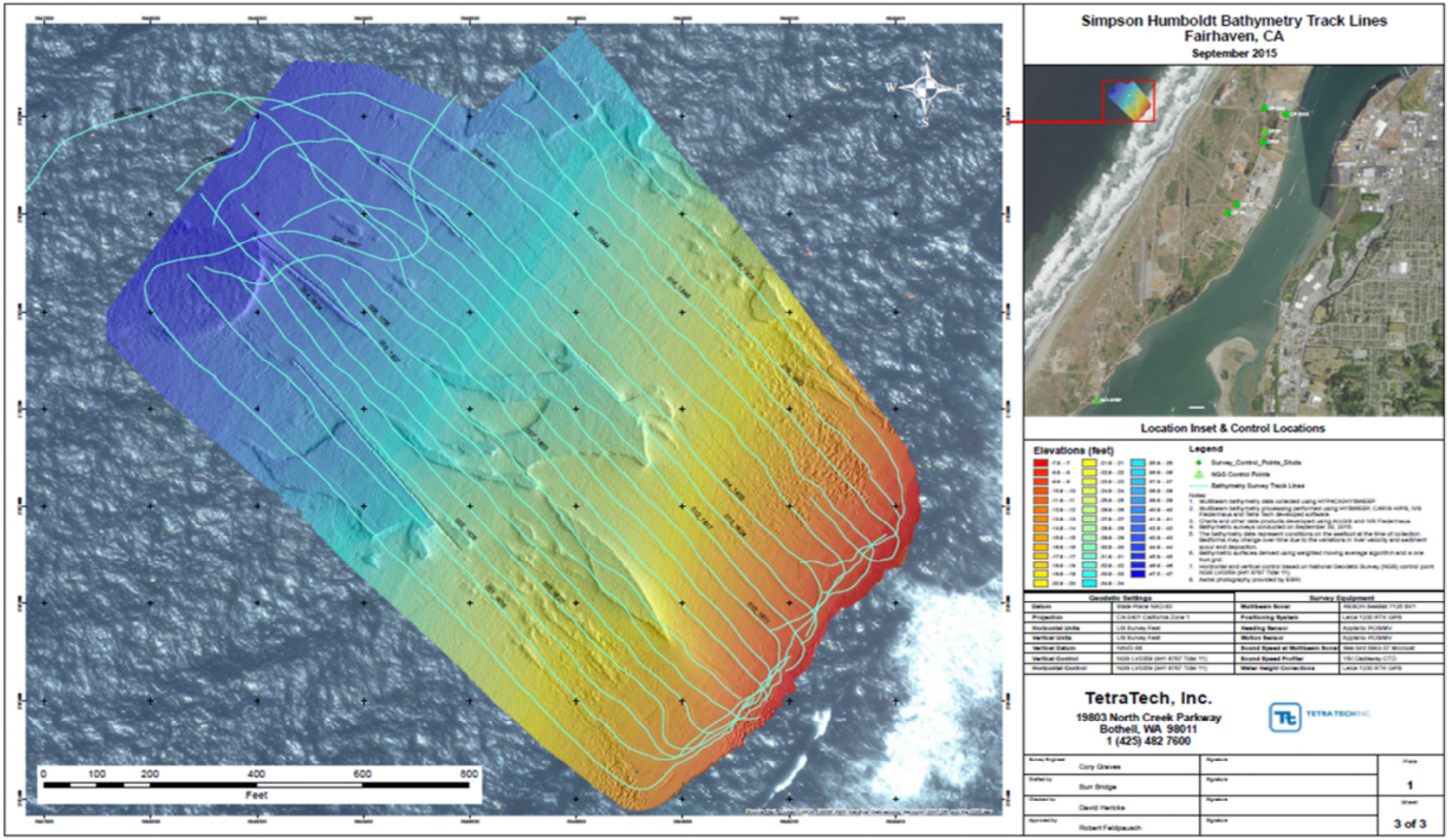

Figure 2-2. Survey vessel track lines for the multibeam survey performed September 2015.

2.5 DATA PROCESSING

2.5.1 Bathymetry

The collected data were processed using Caris HIPS software to generate the XYZ soundings in the survey coordinate system and units. The data cleaning was also performed in Caris HIPS two-dimensional (2D) and three-dimensional (3D) editing software to eliminate any outliers induced by noise in the sensor systems or the acoustic environment. A subsequent area-based cleaning, using the merged data from all the survey lines, was then conducted using the Caris HIPS subset editing tool. The results of this processing were then gridded at a 1-foot resolution in CARIS, using CARIS uncertainty grids. Final data charts were generated using a combination of Fledermaus and ArcGIS software.

3.0 MULTIBEAM SONAR SURVEY RESULTS

Survey coverage

The objective of the survey was to acquire multibeam data to assess the location and determine the condition of the ocean outfalls at the former Simpson mill location in Humboldt County near Fairhaven, California. Twenty-two parallel lines provided continuous bathymetric coverage within area of the ocean outfalls. Due to the sea conditions and shallow depths curves were runon the start and end of the tracklines lines, therefore the endpoint coordinates were related to these and not on the actual planned lines submitted with the pre-survey notification.

The results of the multibeam survey for selected transects are shown in Figures 3-1 through 3-3.

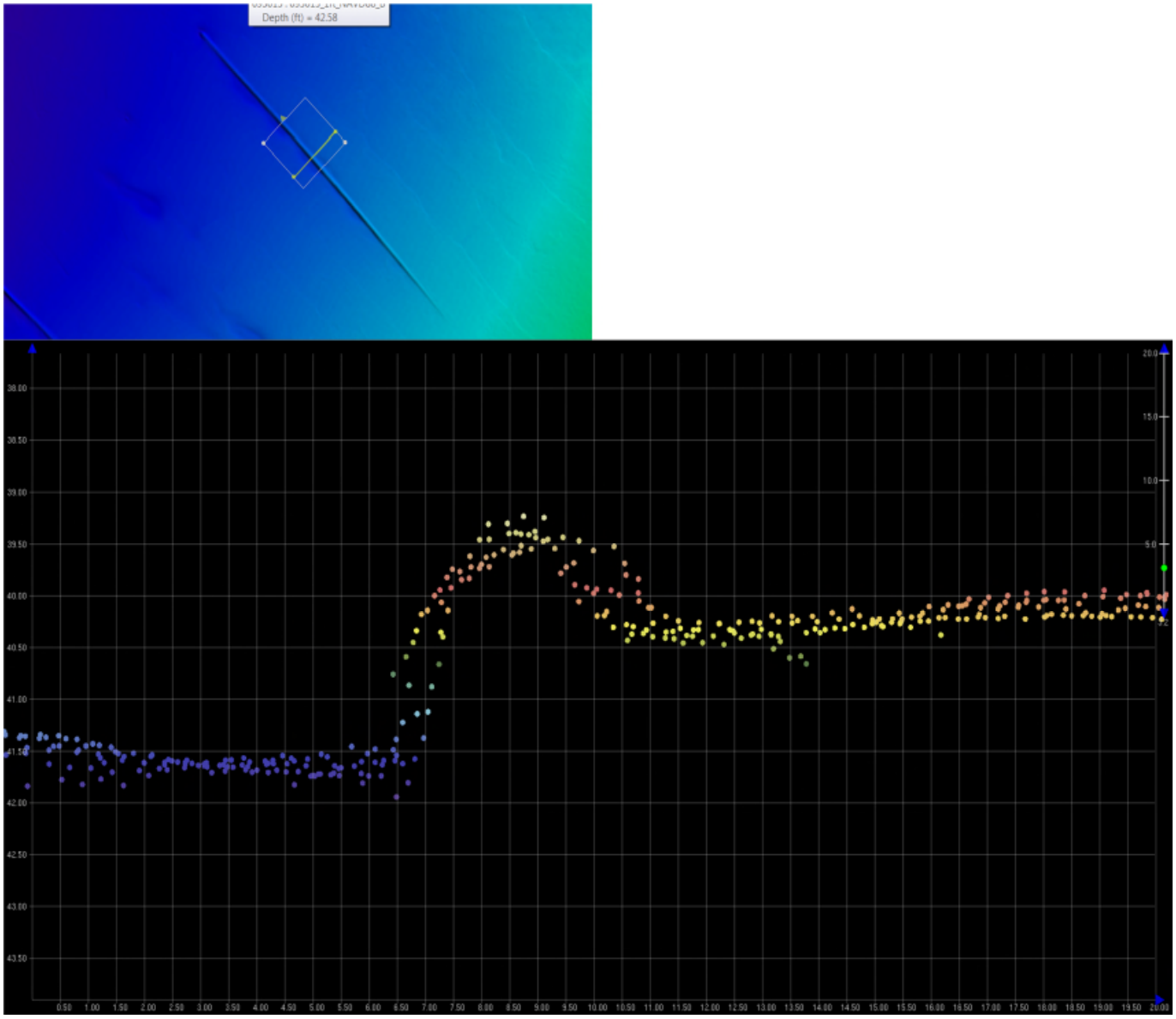

Figure 3-1. Bathymetric Cross Section, North Outfall Visible in Multibeam - Section #2 - Length 322.05'

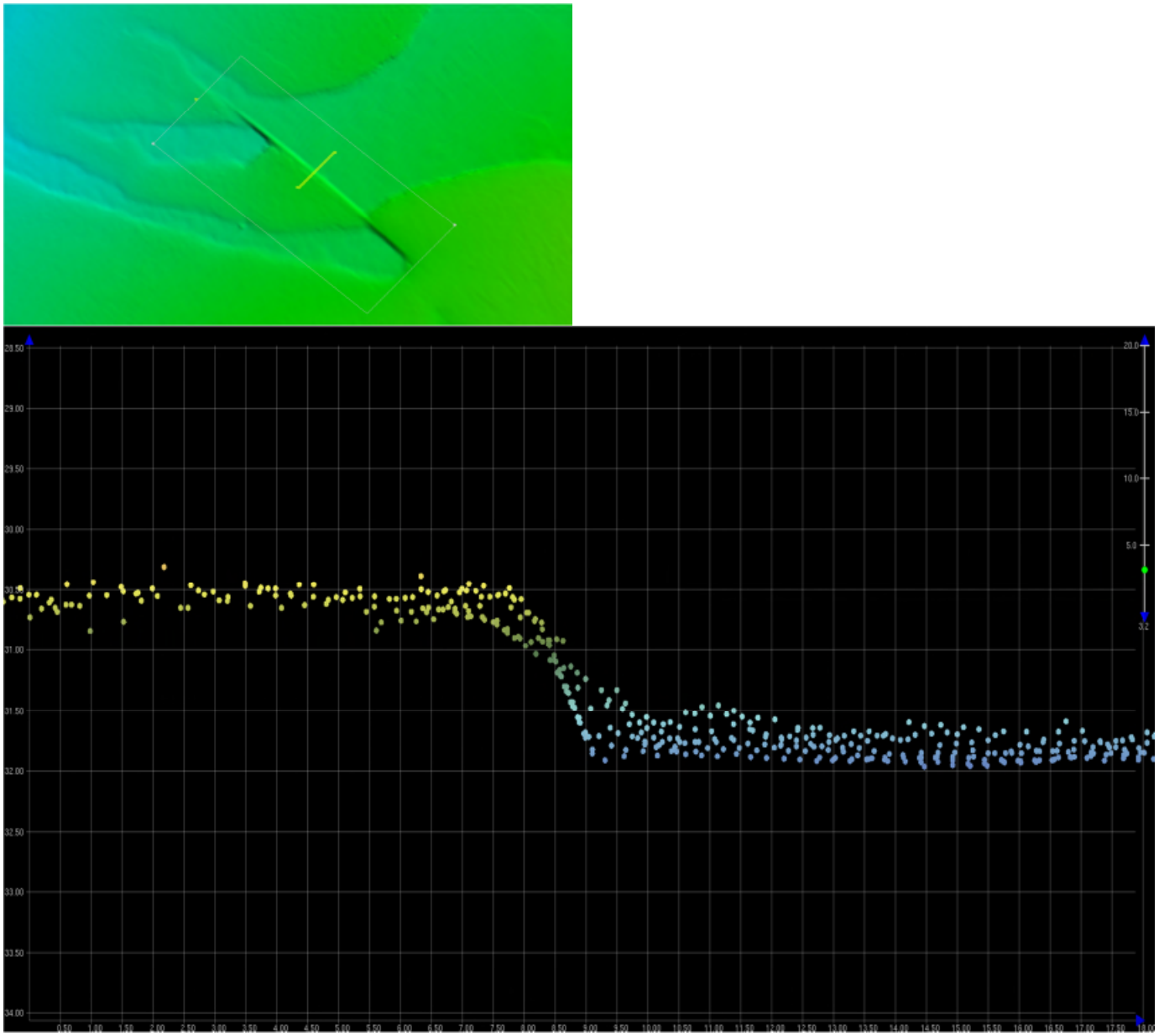

Figure 3-2. Middle Outfall Visible in Multibeam - Section #1 - Length 150.23'

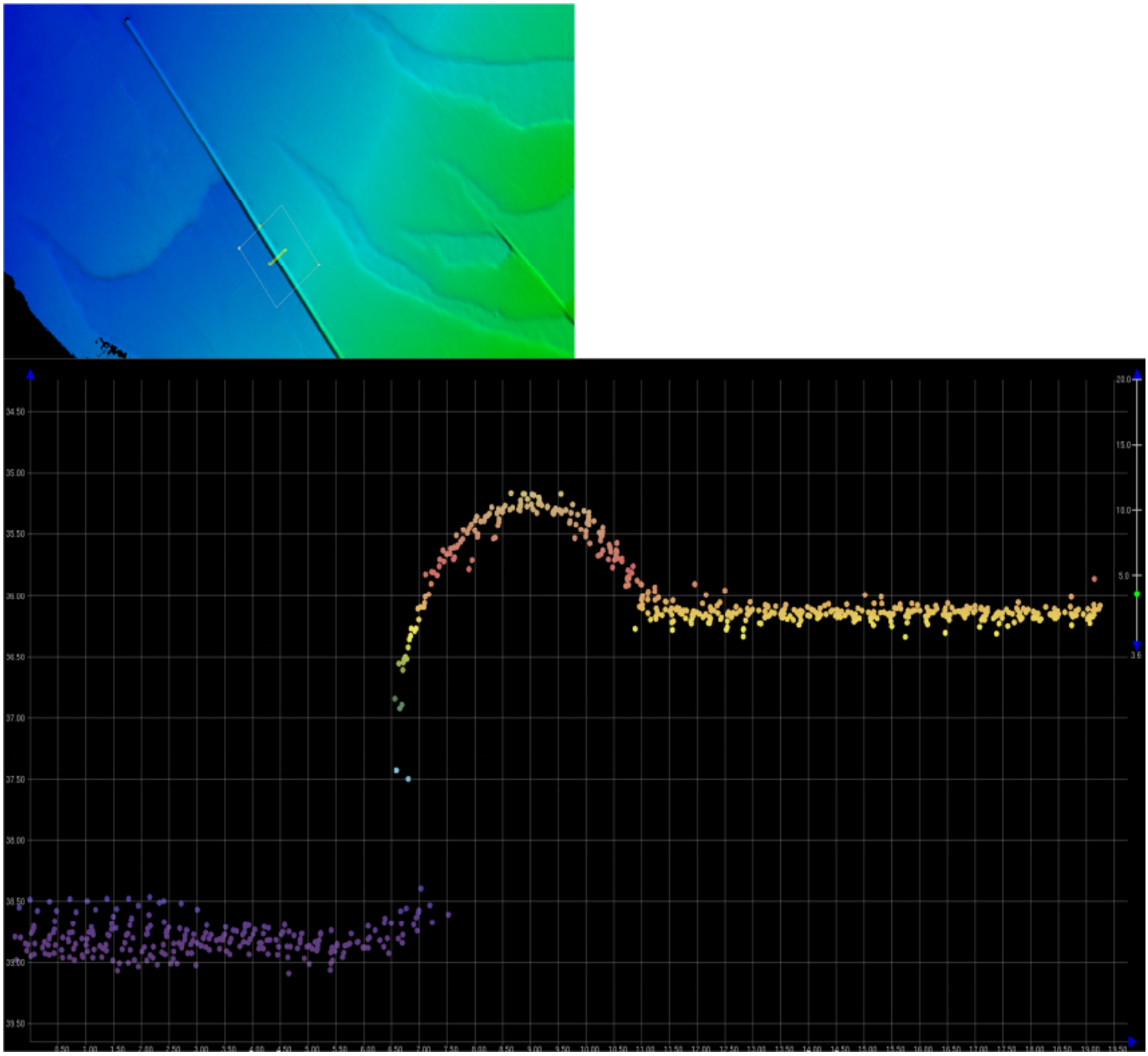

Figure 3-3. South Outfall Visible in Multibeam - Section #2 - Length 512.14'

APPENDIX A

MARINE MAMMAL OBSERVATION REPORT

SIMPSON HUMBOLDT OCEAN OUTFALL MULTIBEAM BATHYMETRIC SURVEY AND VIDEO INSPECTION, HUMBOLDT BAY, CA

Marine Wildlife Monitoring Report

Vessel: Ugle Duck
Marine Mammal Observer: Shannon Coates
Dates of survey: September 29-30, 2015

The results of the Marine Wildlife Monitoring report are described below. Daily field log reports are found in Tables 3-3 and 3-4.

Survey Date: 29 September 2015

Departure from Eureka Public Harbor dock at 16:01.

In transit to the test patch site, including in and out of the harbor did not observe any marine mammals.

Sighting 1: 16:22/ 16:33
1 Harbor Seal (*Phoca vitulina*) –
Observed 1 Harbor seal swimming away from the vessel at 16:22. At 16:33, re-sighted the seal while traveling back down the test line, still in Eureka Public Marina. Harbor seal hanging around docked fishing vessel feeding on scraps being thrown overboard. No response to our several passes, traveling at 2.5 kts. No mitigation required or taken.

Direction of travel: West
Total animals: 1
Distance when first observed: 10m
Closest distance to the vessel: 100m
Mitigation action: None taken (not required)

End of survey was around 17:04 and our boat docked in the harbor at 19:09.

Survey Date: 30 September 2015

Arrived at the Ugle Duck and departed the dock, headed to the survey area at 09:46.

In transit to the survey area, including in and out of the harbor did not observe any marine mammals.

Sighting 1: 10:30/10:33
1 Humpback Whale (*Megaptera novaeangliae*) –
Observed 1 Humpback whale traveling slow, sighted when arrived at study site before sonar began. Made two surfaces and then disappeared beneath the surface. No additional sighting occurred before the sonar was turned on 10:36. No need to take action as the animal was too far away. No change in marine mammal behavior.

Direction of travel: South
Total animals: 1
Distance when first observed: 150m
Closest distance to the vessel: 150m
Mitigation action: None taken, animal occurred too far away

Sighting 2: 13:50/14:00
1 Humpback Whale (*Megaptera novaeangliae*) –
Humpback whale spotted, likely the same whale previously observed, moderate traveling speed. Several surfacings noted by visible blows. No active sonar, prepping to deploy rover. No action taken as animal was too far away. No change in mammal behavior.

Direction of travel: South
Total animals: 1
Distance when first observed: 1000m
Closest distance to the vessel: 1000m
Mitigation action: None taken, animal occurred too far away

Sighting 3: 15:10/15:22
1 Humpback Whale (*Megaptera novaeangliae*) –
1 Humpback whale spotted, likely the same whale previously observed traveling slowly and possibly feeding. The animal surfaced around a bird flock. No need to slow vessel or take action because animal is so far away. No change in marine mammal behavior.

Direction of travel: South
Total animals: 1
Distance when first observed: 1200m
Closest distance to the vessel: 1200m
Mitigation action: None taken, animal occurred too far away

Over the course of 2 days, 2 marine mammal sightings were recorded, none of which required shut-downs as mitigation action for compliance with the marine wildlife protection plan.

Table A-1. Marine mammal sightings for 29 September 2015.

Sighting No.	Time (PDT)	Lat (N)	Long (W)	Species	Dist. From Vessel (m)	Closest Dist. To Vessel (m)	Direction of Travel	Number	Behavior	Sound Source
1	16:22/16:33	40.80548	124.1726	Harbor Seal	100	10	West	1	Feeding/Swimming	Sonar On, 400kHz, 220dB

Table A-2. Marine mammal sightings for 30 September 2015.

Sighting No.	Time (PDT)	Lat (N)	Long (W)	Species	Dist. From Vessel (m)	Closest Dist. To Vessel (m)	Direction of Travel	Number	Behavior	Sound Source
1	10:30/10:33	40.7978	124.2206	Humpback Whale	150	150	South	1	Swimming/ Diving	Off
2	13:50/14:00	40.80067	124.2153	Humpback Whale	1000	1000	South	1	Swimming/ Diving	Off
3	15:10/15:22	40.80182	124.215	Humpback Whale	1200	1200	South	1	Swimming/ Diving	600 kHz low to 1600 kHz high

APPENDIX B

EXHIBIT H

EXHIBIT H

Mitigation Monitoring Program

Mitigation Measure (MM)	Location and Scope of Mitigation	Effectiveness Criteria	Monitoring or Reporting Action	Responsible Party	Timing	Implementation Date(s) and Initials
Air Quality and Greenhouse Gas (GHG) Emissions (MND Section 3.3.3)						
MM AIR-1: Engine Tuning, Engine Certification, and Fuels. The following measures will be required to be implemented by all Permittees under the Offshore Geophysical Permit Program (OGPP), as applicable depending on the county offshore which a survey is being conducted. Pursuant to section 93118.5 of CARB's Airborne Toxic Control Measures, the Tier 2 engine requirement applies only to diesel-fueled vessels.	All Counties: Maintain all construction equipment in proper tune according to manufacturers' specifications; fuel all off-road and portable diesel-powered equipment with California Air Resources Board (CARB)-certified motor vehicle diesel fuel limiting sulfur content to 15 parts per million or less (CARB Diesel).	Daily emissions of criteria pollutants during survey activities are minimized.	Determine engine certification of vessel engines. Review engine emissions data to assess compliance, determine if changes in tuning or fuel are required.	OGPP permit holder and contract vessel operator; California State Lands Commission (CSLC) review of Final Monitoring Report.	Prior to, during, and after survey activities. Submit Final Monitoring Report after completion of survey activities.	N/A- exempt-gasoline vessel
	Los Angeles and Orange Counties: Use vessel engines meeting CARB's Tier 2-certified engines or cleaner; the survey shall be operated such that daily NOx emissions do not exceed 100 pounds based on engine certification emission factors. This can be accomplished with Tier 2 engines if daily fuel use is 585 gallons or less, and with Tier 3 engines if daily fuel use is 935 gallons or less		Verify that Tier 2 or cleaner engines are being used. Calculate daily NOx emissions to verify compliance with limitations.			N/A- exempt-gasoline vessel
	San Luis Obispo County: Use vessel engines meeting CARB's Tier 2-certified engines or cleaner, accomplished with Tier 2 engines if daily fuel use is 585 gallons or less; all diesel equipment shall not idle for more than 5 minutes; engine use needed to maintain position in the water is not considered idling; diesel idling within 300 meters (1,000 feet) of sensitive receptors is not permitted; use alternatively fueled construction equipment on site where feasible, such as compressed natural gas, liquefied natural gas, propane or biodiesel.		Verify that Tier 2 or cleaner engines are being used. Inform vessel operator(s) of idling limitation. Investigate availability of alternative fuels			N/A- exempt-gasoline vessel
	Santa Barbara County: Use vessel engines meeting CARB's Tier 2-certified engines or cleaner, accomplished with Tier 2 engines if daily fuel use is 790 gallons or less.		Verify that Tier 2 or cleaner engines are being used. Investigate availability of alternative fuels			N/A- exempt-gasoline vessel
	Ventura County: Use alternatively fueled construction equipment on site where feasible, such as compressed natural gas, liquefied natural gas, propane or biodiesel.		Investigate availability of alternative fuels.			N/A- exempt-gasoline vessel

Mitigation Measure (MM)	Location and Scope of Mitigation	Effectiveness Criteria	Monitoring or Reporting Action	Responsible Party	Timing	Implementation Date(s) and Initials
MM BIO-1: Marine Mammal and Sea Turtle Presence – Current Information.	All State waters; prior to commencement of survey operations, the geophysical operator shall: (1) contact the National Oceanic and Atmospheric Administration Long Beach office staff and local whale-watching operations and shall acquire information on the current composition and relative abundance of marine wildlife offshore, and (2) convey sightings data to the vessel operator and crew, survey party chief, and onboard Marine Wildlife Monitors (MWMs) prior to departure. This information will aid the MWMs by providing data on the approximate number and types of organisms that may be in the area.	No adverse effects to marine mammals or sea turtles due to survey activities are observed.	Document contact with appropriate sources. Submit Final Monitoring Report after completion of survey activities.	OGPP permit holder; Inquiry to NOAA and local whale watching operators.	Prior to Survey	NE 3/14/15
MM BIO-2: Marine Wildlife Monitors (MWMs).	Except as provided in section 7(h) of the General Permit, a minimum of two (2) qualified MWMs who are experienced in marine wildlife observations shall be onboard the survey vessel throughout both transit and data collection activities. The specific monitoring, observation, and data collection responsibilities shall be identified in the Marine Wildlife Contingency Plan required as part of all Offshore Geophysical Permit Program permits. Qualifications of proposed MWMs shall be submitted to the National Oceanic and Atmospheric Administration (NOAA) and CSLC at least twenty-one (21) days in advance of the survey for their approval by the agencies. Survey operations shall not commence until the CSLC approves the MWMs.	Competent and professional monitoring or marine mammals and sea turtles; compliance with established monitoring policies.	Document contact with and approval by appropriate agencies. Submit Final Monitoring Report after completion of survey activities.	OGPP permit holder.	Prior to survey.	KS 4/29/15
MM BIO-3: Safety Zone Monitoring.	Onboard Marine Wildlife Monitors (MWMs) responsible for observations during vessel transit shall be responsible for monitoring during the survey equipment operations. All visual monitoring shall occur from the highest practical vantage point aboard the survey vessel; binoculars shall be used to observe the surrounding area, as appropriate. The MWMs will survey an area (i.e., safety or exclusion zone) based on the equipment used, centered on the sound source (i.e., vessel, towfish), throughout time that the survey equipment is operating. Safety zone radial distances, by equipment type, include:	No adverse effects to marine mammals or sea turtles due to survey activities are observed; compliance with established safety zones.	Compliance with permit requirements (observers); compliance with established safety zones. Submit Final Monitoring Report after completion of survey activities.	OGPP permit holder.	Prior to survey.	KS 4/29/15

Equipment Type Safety Zone (radius, m)	Equipment Type Safety Zone (radius, m)
Single Beam Echosounder	50
Multibeam Echosounder	500
Side-Scan Sonar	600
Subbottom Profiler	100
Boomer System	100

If the geophysical survey equipment is operated at or above a frequency of 200 kilohertz (kHz), safety zone monitoring and enforcement is not required; however, if geophysical survey equipment operated at a frequency at or above 200 kHz is used simultaneously with geophysical survey equipment less than 200 kHz, then the safety zone for the equipment less than 200 kHz must be monitored. The onboard MWMs shall have authority to stop operations if a mammal or turtle is observed within the specified safety zone and may be negatively affected by survey activities. The MWMs shall also have authority to recommend continuation (or cessation) of operations during periods of limited visibility (i.e., fog, rain) based on the observed abundance of marine wildlife. Periodic reevaluation of weather conditions and reassessment of the continuation/cessation recommendation shall be completed by the onboard MWMs. During operations, if an animal's actions are observed to be irregular, the monitor shall have authority to recommend that equipment be shut down until the animal moves further away from the sound source. If irregular behavior is observed, the equipment shall be shut-off and will be restarted and ramped-up to full power, as applicable, or will not be started until the animal(s) is/are outside of the safety zone or have not been observed for 15 minutes. For nearshore survey operations utilizing vessels that lack the personnel capacity to hold two (2) MWMs aboard during survey operations, at least twenty-one (21) days prior to the commencement of survey activities, the Permittee may petition the CSLC to conduct survey operations with one (1) MWM aboard. The CSLC will consider such authorization on a case-by-case basis and factors the CSLC will consider will include the timing,

	type, and location of the survey, the size of the vessel, and the availability of alternate vessels for conducting the proposed survey. CSLC authorizations under this subsection will be limited to individual surveys and under any such authorization; the Permittee shall update the MWCP to reflect how survey operations will occur under the authorization.					
MM BIO-4: Limits on Nighttime OGPP Surveys.	All State waters; nighttime survey operations are prohibited under the OGPP, except as provided below. The CSLC will consider the use of single beam echosounders and passive equipment types at night on a case-by-case basis, taking into consideration the equipment specifications, location, timing, and duration of survey activity.	No adverse effects to marine mammals or sea turtles due to survey activities are observed.	Presurvey request for nighttime operations, including equipment specifications and proposed use schedule. Document equipment use. Submit Final Monitoring Report after completion of survey activities	OGPP permit holder.	Approval required before survey is initiated. Monitoring Report following completion of survey.	KS 4/29/15
MM BIO-5: Soft Start.	All State waters; the survey operator shall use a "soft start" technique at the beginning of survey activities each day (or following a shut down) to allow any marine mammal that may be in the immediate area to leave before the sound sources reach full energy. Surveys shall not commence at nighttime or when the safety zone cannot be effectively monitored. Operators shall initiate each piece of equipment at the lowest practical sound level, increasing output in such a manner as to increase in steps not exceeding approximately 6 decibels (dB) per 5- minute period. During ramp-up, the Marine Wildlife Monitors (MWMs) shall monitor the safety zone. If marine mammals are sighted within or about to enter the safety zone, a power-down or shut down shall be implemented as though the equipment was operating at full power. Initiation of ramp-up procedures from shut down requires that the MWMs be able to visually observe the full safety zone.	No adverse effects to marine mammals or sea turtles due to survey activities are observed.	Compliance with permit requirements (observers); compliance with safe start procedures. Submit Final Monitoring Report after completion of survey activities.	OGPP permit holder.	Immediately prior to survey.	MJ 04-29 Apr 15

MM BIO-6: Practical Limitations on Equipment Use and Adherence to Equipment Manufacturer's Routine Maintenance Schedule.	All State waters; geophysical operators shall follow, to the maximum extent possible, the guidelines of Zykov (2013) as they pertain to the use of subbottom profilers and sidescan sonar, including: • Using the highest frequency band possible for the subbottom profiler; • Using the shortest possible pulse length; and • Lowering the pulse rate (pings per second) as much as feasible. Geophysical operators shall consider the potential applicability of these measures to other equipment types (e.g., boomer). Permit holders will conduct routine inspection and maintenance of acoustic-generating equipment to ensure that low energy geophysical equipment used during permitted survey activities remains in proper working order and within manufacturer's equipment specifications. Verification of the date and occurrence of such equipment inspection and maintenance shall be provided in the required presurvey notification to CSLC.	No adverse effects to marine mammals or sea turtles due to survey activities are observed.	Document initial and during survey equipment settings. Submit Final Monitoring Report after completion of survey activities.	OGPP permit holder.	Immediately prior to and during survey.	ML 04-29 Apr 15
MM BIO-7: Avoidance of Pinniped Haul-Out Sites.	The Marine Wildlife Contingency Plan (MWCP) developed and implemented for each survey shall include identification of haul-out sites within or immediately adjacent to the proposed survey area. For surveys within 300 meters (m) of a haul-out site, the MWCP shall further require that: • The survey vessel shall not approach within 91 m of a haul-out site, consistent with National Marine Fisheries Service (NMFS) guidelines; • Survey activity close to haul-out sites shall be conducted in an expedited manner to minimize the potential for disturbance of pinnipeds on land; and • Marine Wildlife Monitors shall monitor pinniped activity onshore as the vessel approaches, observing and reporting on the number of pinnipeds potentially disturbed (e.g., via head lifting, flushing into the water). The purpose of such reporting is to provide CSLC and California Department of Fish and Wildlife (CDFW) with information regarding potential	No adverse effects to pinnipeds at haul outs are observed.	Document pinniped reactions to vessel presence and equipment use. Submit Final Monitoring Report after completion of survey activities.	OGPP permit holder.	Monitoring Report following completion of survey	NE 3/14/15
MM BIO-8: Reporting Requirements –	All State waters; if a collision with marine mammal or reptile occurs, the vessel operator shall document the conditions under which the accident occurred, including the	No adverse effects to marine mammals or sea	Submit Final Monitoring Report after completion of survey	OGPP permit holder.	Monitoring Report following	N/A No Collisions Reported 04-29 /

Collision.	following: • Vessel location (latitude, longitude) when the collision occurred; • Date and time of collision; • Speed and heading of the vessel at the time of collision; • Observation conditions (e.g., wind speed and direction, swell height, visibility in miles or kilometers, and presence of rain or fog) at the time of collision; • Species of marine wildlife contacted (if known); • Whether an observer was monitoring marine wildlife at the time of collision; and, • Name of vessel, vessel owner/operator, and captain officer in charge of the vessel at time of collision. After a collision, the vessel shall stop, if safe to do so; however, the vessel is not obligated to stand by and may proceed after confirming that it will not further damage the animal by doing so. The vessel will then immediately communicate by radio or telephone all details to the vessel's base of operations, and shall immediately report the incident. Consistent with Marine Mammal Protection Act requirements, the vessel's base of operations or, if an onboard telephone is available, the vessel captain him/herself, will then immediately call the National Oceanic and Atmospheric Administration (NOAA) Stranding Coordinator to report the collision and follow any subsequent instructions. From the report, the Stranding Coordinator will coordinate subsequent action, including enlisting the aid of marine mammal rescue organizations, if appropriate. From the vessel's base of operations, a telephone call will be placed to the Stranding Coordinator, NOAA National Marine Fisheries Service (NMFS), Southwest Region, Long Beach, to obtain instructions. Although NOAA has primary responsibility for marine mammals in both State and Federal waters, the California Department of Fish and Wildlife (CDFW) will also be advised that an incident has occurred in State waters affecting a protected species.	turtles due to survey activities are observed.	activities.		completion of survey.	04-30 Apr 15
MM BIO-9: Limitations on	All MPAs; prior to commencing survey activities, geophysical operators shall coordinate with the CLSC,	No adverse effects to MPA	Monitor reactions of wildlife to survey	OGPP permit holder; survey	Prior to survey.	N/A No MPAs in project area

Survey Operations in Select Marine Protected Areas (MPAs).	California Department of Fish and Wildlife (CDFW), and any other appropriate permitting agency regarding proposed operations within MPAs. The scope and purpose of each survey proposed within a MPA shall be defined by the permit holder, and the applicability of the survey to the allowable MPA activities shall be delineated by the permit holder. If deemed necessary by CDFW, geophysical operators will pursue a scientific collecting permit, or other appropriate authorization, to secure approval to work within a MPA, and shall provide a copy of such authorization to the CSLC as part of the required presurvey notification to CSLC. CSLC, CDFW, and/or other permitting agencies may impose further restrictions on survey activities as conditions of approval	resources due to survey activities are observed.	operations; report on shutdown conditions and survey restart. Submit Final Monitoring Report after completion of survey activities.	permitted by CDFW.		
MM HAZ-1: Oil Spill Contingency Plan (OSCP) Required Information.	Permittees shall develop and submit to CSLC staff for review and approval an OSCP that addresses accidental releases of petroleum and/or non-petroleum products during survey operations. Permittees' OSCPs shall include the following information for each vessel to be involved with the survey: • Specific steps to be taken in the event of a spill, including notification names, phone numbers, and locations of: (1) nearby emergency medical facilities, and (2) wildlife rescue/response organizations (e.g., Oiled Wildlife Care Network); • Description of crew training and equipment testing procedures; and • Description, quantities, and location of spill response equipment onboard the vessel.	Reduction in the potential for an accidental spill. Proper and timely response and notification of responsible parties in the event of a spill.	Documentation of proper spill training. Notification of responsible parties in the event of a spill.	OGPP permit holder and contract vessel operator.	Prior to survey.	HE 3/17/15
MM HAZ-2: Vessel fueling restrictions.	Vessel fueling shall only occur at an approved docking facility. No cross vessel fueling shall be allowed.	Reduction in the potential for an accidental spill.	Documentation of fueling activities.	Contract vessel operator.	Following survey.	N/A- boat is trailered and fuels on land
MM HAZ-3: OSCP equipment and supplies.	Onboard spill response equipment and supplies shall be sufficient to contain and recover the worst-case scenario spill of petroleum products as outlined in the OSCP.	Proper and timely response in the event of a spill.	Notification to CSLC of onboard spill response equipment/supplies inventory, verify ability to respond to worst-case spill.	Contract vessel operator.	Prior to survey.	HE 3/17/15- supplies confirmed
MM HAZ-1: Oil Spill Contingency	Outlined under **Hazards and Hazardous Materials** (above)					HE 3/17/15

Plan (OSCP) Required Information.						
MM HAZ-2: Vessel fueling restrictions.	Outlined under **Hazards and Hazardous Materials** (above)					N/A- boat is trailered and fuels on land
MM HAZ-3: OSCP equipment and supplies.	Outlined under **Hazards and Hazardous Materials** (above)					HE 3/17/15
MM BIO-9: Limitations on Survey Operations in Select MPAs.	Outlined under **Biological Resources** (above)					N/A No MPAs
MM REC-1: U.S. Coast Guard (USCG), Harbormaster, and Dive Shop Operator Notification.	All California waters where recreational diving may occur; as a survey permit condition, the CSLC shall require Permittees to provide the USCG with survey details, including information on vessel types, survey locations, times, contact information, and other details of activities that may pose a hazard to divers so that USCG can include the information in the Local Notice to Mariners, advising vessels to avoid potential hazards near survey areas. Furthermore, at least twenty-one (21) days in advance of in-water activities, Permittees shall: (1) post such notices in the harbormasters' offices of regional harbors; and (2) notify operators of dive shops in coastal locations adjacent to the proposed offshore survey operations.	No adverse effects to recreational divers from survey operations.	Notify the USCG, local harbormasters, and local dive shops of planned survey activity. Submit Final Monitoring Report after completion of survey activities.	OGPP Permit holder.	Prior to survey.	NE 3/14/15